

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims 1-6:**

1. (currently amended) A method for producing an aqueous solution of free hydroxylamine (HA) using simultaneous countercurrent treatment of an aqueous HA salt solution with ammonia or ammonia water at a process temperature, separating the HA solution obtained by distilling into aqueous solutions of HA and a salt fraction under a pressure above the atmospheric pressure, reconcentrating by distilling the aqueous HA salt solution in the countercurrent with a strip medium in a reactive distillation column with a liquid-phase evaporator, wherein the stripping medium is a mixture of steam and a non-condensable inert gas and controlling the process temperature at a defined pressure by the quantity of non-condensable inert gas at the column inlet.
2. (previously presented) The method according to claim 1, wherein nitrogen is used as the non-condensable inert gas.
3. (previously presented) The method according to claim 1, wherein the step of controlling the process temperature includes increasing the portion of non-condensable inert gas to result in a drop in temperature.

4. (previously presented) The method according to claim 1, wherein the process is performed at column pressures in the range from 1.05 to 2.5 bara.
5. (previously presented) The method according to claim 1, wherein the weight of the non-condensable inert gas is 0.44 to 5.8 times the weight of the feeding quantity of the aqueous solution of HA salt.
6. (previously presented) The method of claim 1 wherein the step of controlling the process temperature includes decreasing the portion of said gas to result in an increase in temperature.